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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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CHRISTOPHER J. RECKAMP
MARKISON & RECKAMP, P.C.
P. O. BOX 06229
WACKER DRIVE
CHICAGO, IL 606060229

EXAMINER

PIZIALI, JEFFREY J

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 03/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/287,776

Applicant(s)

KANG ET AL.

Examiner

Jeff Piziali

Art Unit

2673

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 October 2001.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-22 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 22 June 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

4) Interview Summary (PTO-413) Paper No(s). _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 30, 2001 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Blahut et al. (5,570,126).

Regarding claim 1, Blahut discloses a video overlay apparatus [Fig. 4; 314] comprising: a video scaler [Fig. 4; 432] operatively responsive to input video data; and a programmable switching mechanism [Fig. 4; 440], operatively coupled to the video scaler, to selectively route video data from the video scaler to one of a plurality of video overlay generators [Fig. 4; 414, 416 and 430] to facilitate selective display of overlay data on a display device (Column 6, Lines 39-49).

Regarding claims 2, 10 and 16, Blahut discloses the programmable switching mechanism includes a programmable register (Column 6, Lines 39-49).

Regarding claim 3, Blahut discloses a first display engine [Fig. 4; 432] responsive to first graphics data [Fig. 5; 520] for generating first video window timing data; a second display engine [Fig. 4; 432] responsive to second graphics data [Fig. 5; 530] for generating second video window timing data; a first video overlay generator [Fig. 4; 430] operatively responsive to the first graphics data; and a second video overlay generator [Fig. 4; 414] operatively responsive to the second graphics data (Column 9, Lines 15-29).

Regarding claims 4 and 11, Blahut discloses a graphics data unpacker [Fig. 4; 418 & 420] operative to unpack graphics data received from a respective display engine; a keyer [Fig. 3; 310] operatively coupled to the graphics data unpacker and responsive to selectively route video data from the programmable switching mechanism; and a data packer [Fig. 4; 444] operatively coupled to the keyer to pack combined video and graphics data from the keyer (Column 6, Lines 11-49).

Regarding claims 5 and 19, Blahut discloses the programmable switching mechanism includes a selectable video clock source [Fig. 4; "Still-Frame" and "Full-Motion"] operatively coupled to the video scaler wherein the video scaler scales input video corresponding to a display

engine for at least one of a plurality of video overlay generators in response to a video clock signal output from the selectable video clock source (Column 6, Lines 21-49).

Regarding claims 6, 12 and 20, Blahut discloses the programmable switching mechanism further facilitates programming of frame buffer space for each display engine based on which video overlay generator has been selected to receive input video (Column 7, Lines 24-44).

Regarding claims 7, 13 and 21, Blahut discloses the selectable video clock source includes a programmable switch to facilitate switching between a plurality of display dependent clock signals [Fig. 4; "Still-Frame" and "Full-Motion"] that are selectively coupled to a common video scaler line buffer (Column 6, Lines 21-49).

Regarding claims 8, 14 and 22, Blahut discloses a user interface [Fig. 1; 132] operable to control the programmable switching mechanism to facilitate selective overlay display on a per application basis (Column 4, Lines 48-57).

Regarding claim 9, the limitations were previously addressed in the above rejection of claims 1, 3, 5 and 19.

Regarding claim 15, the limitations were previously addressed in the above rejection of claim 1.

Regarding claim 17, the limitations were previously addressed in the above rejection of claim 3, furthermore Blahut discloses generating a first video overlay [Fig. 5; "Background"] based on the first graphics data and at least a portion of selectively routed input video data; and generating a second video overlay [Fig. 5; 550] based on the second graphics data and at least a portion of selectively routed input video data (Column 7, Lines 24-44).

Regarding claim 18, the limitations were previously addressed in the above rejection of claims 4 and 11, furthermore Blahut discloses keying [Fig. 4; 440] video and graphics data from a respective display engine and the selectively routed video data selectively routed by a programmable switching mechanism; and packing [Fig. 4; 444] combined video and graphics data for each respective video graphic overlay generator for alternate output to the display (Column 6, Lines 21-49).

Response to Arguments

4. Applicants' arguments filed October 30, 2001 have been fully considered but they are not persuasive.

The applicants contend Blahut's video combiner [Fig. 4, 440] does not qualify as a 'programmable switching mechanism.' The examiner respectfully disagrees. Blahut's video combiner provides identical functionality as is presently being claimed for the 'programmable switching mechanism' (i.e. selectively routing video data, facilitating selective display of overlay data -- see Column 6, Lines 33-49). The applicants are kindly invited to note that their

'programmable switching mechanism,' as claimed, does not perform any actual switching -- it, instead, merely 'routes' video data (see claims 1, 9 and 15).

The applicants contend Blahut does not teach routing video data from the video scaler [Fig. 4, 432] to any video overlay generators. The examiner respectfully disagrees. Figure 4's elements 414, 416 and 430 operate individually as video generators. These video generators when coupled with the video combiner effectively form plural 'video overlay generators' (Column 6, Lines 39-49). Thereby, Blahut does indeed route video scaler data to plural 'video overlay generators.'

The applicants contend Blahut's text and cursor generators [Fig. 4, 414 & 416] do not output 'video data.' The examiner respectfully disagrees. Merriam-Webster's Collegiate Dictionary defines 'video' as "being, relating to, or involving images on a television screen or computer display." Text and cursors most certainly do qualify as such imagery.

The applicants contend Blahut fails to disclose using a 'programmable register.' The examiner respectfully disagrees. To create a video frame (as taught in Column 8, Lines 19-29) in Blahut's video combiner, a memory register would be inherently necessitated.

The applicants contend Blahut, by teaching a common video combiner, fails to disclose first and second overlay generators responsive respectively to first and second graphics data. The examiner respectfully disagrees. Blahut's video combiner works in conjunction with plural

video generators [Fig. 4, 414, 416, 430 & 432] to effectively form plural 'video overlay generators' (Column 9, Lines 15-29).

The applicants contend Blahut does not disclose a 'keyer' coupled to a 'graphics data unpacker' and responsive to the selectively routed video data. The examiner respectfully disagrees. Blahut's control and demultiplexer [Fig. 3, 310] provides keyer-functionality, while the video decompressors [Fig. 4, 418 & 420] provide graphics-data-unpacking-functionality (Column 6, Lines 11-49).

The applicants contend Blahut -- by teaching multiple video scalers visually superimposed on one another, showing separate input and output signals for each -- fails to disclose a common video scaler line buffer. The examiner must respectfully disagree. Blahut's plural superimposed video scalers [Fig. 4, 432] operate in unison, effectively forming a single, common video scaler line buffer (Column 6, Lines 21-49).

Under such reasoning, the rejection of claims 1-22 is deemed proper and thereby maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

JP
J.P.
March 8, 2002

BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600